



Course Syllabus
Semester :
School of Nursing and Health Professions
Department of Sonography

<i>Course Name:</i>	Vascular Ultrasound IV
<i>Course & Section Number:</i>	DMS 205
<i>Meeting Day(s) & Time(s):</i>	
<i>Credits:</i>	3
<i>Contact Hours:</i>	3
<i>Instructor's Name:</i>	
<i>Office Hours & Location:</i>	
<i>OCC Email: **</i>	
<i>Additional Contact Information:</i>	

**Please use only Owens email for course communications.

Catalog description:

Review of arterial anatomy and physiology. Examines pathology and pathophysiology of the arterial system with age specific comparisons. The necessary analytical skills of differential diagnosis needed in the clinical environment are emphasized. Correlation with other imaging modalities along with pertinent history and laboratory data is discussed. The interpersonal and interdepartmental relationships of the imaging department and patient management skills will be included.

Prerequisite/Corequisites: DMS 213/ DMS 215, DMS 217

Course Materials:

Daigle R. Techniques in Noninvasive Vascular Diagnosis, An Encyclopedia of Vascular Testing, 5th edition, Summer Publishing, 2023. ISBN: 978-0989932967

Library Resources; Access to SVU website

*If a **print book, e-book, or access code** is required for class, you can access the Owens Community College e-Campus Bookstore by accessing the online link, called “Find Books” on the course schedule for each course section.*

What You Will Learn in the Course

Course Objectives:

This course will:

1. Introduce students to the abnormalities of the peripheral arterial system.
2. Introduce the concept of correlating pertinent history, patient assessment and laboratory tests, including other imaging modalities with sonographic examinations as it relates to pathology and pathophysiology.
3. Provide an overview of the pharmacology related to arterial pathology.
4. Provide an opportunity to research interesting cases and prepare a PowerPoint presentation for peers.

Student Learning Outcomes:

Students will:

Outcome	Where assessed
1. List signs, symptoms, and risk factors of arterial vascular diseases.	Homework, Quizzes, Case Presentations, Tests, Comprehensive Final
2. Describe disease processes of the arterial vascular system.	Case Presentations, Tests, Comprehensive Final
3. Identify arterial vascular disease on sonographic images.	Homework, Case Presentations, Tests, Comprehensive Final Exam
4. Recognize the function and sonographic appearance of peripheral vascular grafts. Aorto-iliac, Carotid, Dialysis etc.	Case Presentations, Tests, Comprehensive Final Exam

Technology, Lab, and File Requirements:

Microsoft Office 365

<https://www.owens.edu/office365/>

Respondus

<https://download.respondus.com/lockdown/download.php?id=139313370>

Academic Support

Disability Services Resource Center: If you have a disability or acquire one, you may be entitled to receive reasonable accommodations intended to assure you an equal opportunity to participate in and benefit from the program. To receive more information or to register for accommodations, please contact the Disability Resource Center at 567-661-7007, email disability@owens.edu, visit <https://www.owens.edu/disability/>, or stop by College Hall 124.

Tutoring Services: Owens Community College offers academic tutoring and assistance in a variety of subjects including: accounting, computing, economics, mathematics, science, and writing. For more information go to: <https://www.owens.edu/successcenters/>.

Counseling Services: Counseling Services provides assistance to students experiencing personal, educational, interpersonal/relationship, family, social, or psychological difficulties. If you feel you may benefit from this service, please contact them at counselingservices@owens.edu. More information is at <https://www.owens.edu/counseling/>.

Campus and Community Connections: The Center for Campus and Community Connections (College Hall 123) is a walk-in office created to provide retention support through resource stability initiatives and community connections. Go here for more information: <https://www.owens.edu/connection/> or contact connections@owens.edu

Owens Library: The Owens Library offers two locations (Toledo and Findlay) as well as online resources. For more information visit <https://www.owens.edu/library/>.

Students can find more information on campus resources, student support, student life, and security at this [link](#).

General Information

Student Code of Conduct: All students are expected to follow Owens Community College's Student Code of Conduct, which includes academic honesty, encompassing plagiarism. See the Board Policy for more information.

Anti-Discrimination and Harassment & Title IX/Sexual Misconduct: All students, faculty, and staff are expected to follow Owens Community College's Anti-Discrimination and Harassment Policy and the College's Title IX Policy/Sexual Misconduct Procedures and Guidelines. The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

Religious Accommodations: A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written email notice with the specific dates for an absence and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy*. The request for an alternative accommodation will be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: provost@owens.edu. The policy may be found on the Owens website: [3358:11-2-63 Accommodation for a Student Absence for the Observance of Religious Beliefs and Practices Policy](#)

Document Collection: Throughout the semester, your instructors may ask for a variety of assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials until the end of the semester.

Classroom Admittance: OCC classes shall only be attended by the officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See [FERPA](#) regulations for more information.

Use of AI Tools: This course permits you to use artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to get guidance on assignments, as long as you do so in an ethical and responsible manner. Essentially, you can think of these tools as ways to help you learn but not to entirely create work for assignments like discussion board posts, essays, presentation slides, and so on. AI is more like your tutor or TA, not a replacement for your independent thinking.

This means that you must:

- Not use AI tools to replace your own thinking or analysis or to avoid engaging with the course content.
- Cite or explain any AI tools you use. Provide the name of the AI tool, the date of access, the URL of the interface, and the specific prompt or query you used to generate the output.
- Be transparent and honest about how you used the AI tool and how it contributed to your assignment. Explain what you learned from the AI tool, how you verified its accuracy and reliability, how you integrated its output with your own work, and how you acknowledged its limitations and biases.

You are accountable for any mistakes or errors made by the AI tool. Always check and edit the output before submitting your work. If you discover any inaccuracies or inconsistencies in the output after submission, notify the instructor immediately and correct them as soon as possible. Using AI tools in an unethical or irresponsible manner, such as copying or paraphrasing the output without citation or transparency, using the output as your own work without verification or integration, or using the output to misrepresent your knowledge or skills, is considered a form of academic dishonesty and will result in a zero grade for the assignment and possible disciplinary action. If you have any questions about what constitutes ethical and responsible use of AI tools, please consult with the instructor **before** submitting your work.

Student Responsibilities & Instructor Expectations

Student Responsibilities:

- You are expected to attend weekly classes and arrive on time. If you are going to be absent, please email your instructor before class begins. Afterward, review the assignment calendar to see what was missed and reach out if you have questions.
- You are expected to fully engage with the course material and consistently put forth your best effort in lecture and lab.
- If you are unable to complete an assignment on time, contact your instructor as soon as possible to discuss your options.
- Email is the preferred method of communication outside of office hours. Please include clear and specific details in your message so your instructors can respond efficiently.
- You are encouraged to ask questions or request clarification. Unless we hear otherwise, we will assume you understand the material. Each class builds on previous concepts, so staying current is important.
- Show respect for your instructors, classmates, and the learning environment.
- You are expected to follow all guidelines and procedures outlined in the Sonography Department Procedure Manual.
- For technical issues related to Blackboard, contact the Owens Help Desk.

Instructor Expectations:

- The instructor will be respectful of your time and begin and end class on time. If any changes to class times occur, you will be notified by email.
- Your instructor's goal is to review and return assignments that require student corrections within three days of submission. Assignments that do not require corrections or resubmission may take longer to be fully graded. If it has been more than three days and you are waiting on feedback for an assignment you believe may need revision, please email your instructor.
- Your instructor checks their email several times a day, but also has responsibilities outside of teaching this course. They will do their best to respond to your email within 24 hours on weekdays and within 72 hours on the weekends.
- Office hours are available outside of class time to support you with any questions or concerns related to the course. Please don't hesitate to make use of this time.
- Your instructor welcomes and encourages questions.
- Teaching is a two-way process, and your instructor hopes to learn from your insights, questions, and feedback throughout the course.

How Grades are Determined and Major Assignments

Grading Procedure:

Grades will be calculated on the following scale.

93% and Above	A
85% to 92%	B
76% to 84%	C
60% to 75%	D
59% or Below	F

If the percentage earned is less than 76% for the course, the student will earn a grade of “**D or F**” for the course and will not be able to continue in the program.

The final grade for the course will be computed using the following weights.

Homework	15%
Quizzes	20%
Case Presentations	15%
Tests	25%
<u>Comprehensive Final</u>	<u>25%</u>
Total:	100%

****Please note that ½ point will be deducted from all homework, tests, and assignments for each spelling error. Using abbreviations will also result in a ½ point deduction. ****

Homework

There will be homework assignments that may consist of a vocabulary worksheet, article to read or a webinar to view. There will also be other assigned tasks related to protocols, laboratory values and other lecture topics. Vocabulary assignments are due with any homework. If the assignment is an SVU Webinars, there are accompanying assessments that need to be printed off and turned in to get credit. Homework is due prior to the start of class on the designated due date. If a student will be absent on the day the homework is due, the assignment must be submitted through Blackboard before the start of the class to receive full credit. Late worksheets will be accepted at half credit up to 24 hours past the due date. Beyond 24 hours after the due date, late worksheets will not be accepted without prior approval from the instructor. Homework will be worth 15% of the final grade.

Quizzes

There will be four quizzes based either on homework or assigned articles will be given and averaged at 20% of the total course grade. The quizzes may be announced or pop quizzes. It is expected that students read and review the material prior to coming to class. There will be no makeup quizzes without prior approval from the instructor.

Case Presentations

Students are required to print the Medical Records Removal Form from Trajecsys and turn in with each case study. Without it, you will receive a "0" on the assignment.

There will be case presentations every other week that culminates to a final case presentation. The cases are obtained from the clinical site which consists of an interesting case we can all learn from. This combined will be worth a total of 15% of the overall course grade. There will be NO late assignments accepted without prior approval by the instructor.

Tests

Three written tests will be given and averaged at 25% of the total course grade. All tests may be multiple choice, fill-in, short answer, essay, or true/false in nature. There may also be diagrams and ultrasound images on the test. Any student, who is unable to attend to take the exam, must notify the course instructor at least 30 minutes prior to the class period in order to receive full credit. If no notification is

received prior to missing the test, a five (5) point reduction will be taken from the score of the make-up test. The makeup test will consist of fill-in-the-blank questions and answers and will be taken within five (5) days of the original test date.

Comprehensive Final

One comprehensive final exam will be given and may include all lecture content covered. It will be worth 25% of the total course grade. Any student, who is unable to attend to take the exam, must notify the course instructor at least 30 minutes prior to the class period in order to receive full credit. If no notification is received prior to missing the test, a five (5) point reduction will be taken from the score of the make-up test. The makeup test will consist of fill-in-the-blank questions and answers and will be taken within three (3) days of the original test date.

Assignment Calendar

Week	Topic	Reading Assignment	Assignment Due	SLO
One	Review Syllabus Course Requirements <u>Carotids:</u> Endarterectomy/Plasty/Stent --Exam Write up (Carotid) --Uncommon findings	Rumwell Ch 2,5,6 Daigle: Ch 2,3 -Journal Article on Endarterectomy Post Stenosis Criteria	Carotid Image Interpretation HW	1,2
Two	College Closed – HOLIDAY AS NEEDED			
Three	<u>Vertebrobasilar and Subclavian Steal</u> -Color flow direction discussion -Uncommon findings (TCAR, ECAS NASCET)	Supplement Handout Rumwell Ch 2,5,6 Daigle:Ch 4	Carotid Quiz 1 Carotid interpretation of Image HW 1 due	1,2
Four	-How to do a Case Study Presentation - <u>Aorta:</u> EVAR/Stent Graft/Leaks -Exam Write up (Aorta)	Supplement Handout Rumwell: Ch 5, 9, 10 Daigle: Ch17	Journal article vertebral HW 2	1,2
Five	Test #1 Case Study Presentation 1 Due		HW 2 due	1-4
Six	- <u>Hemodialysis:</u> fistulas- grafts, stents, pseudo, banding, Wavelinq/Ellypsis etc Exam Write up (Diaylsis)	Supplement Handout Daigle: Ch 15	Quiz 2	1,2

	<u>-Hemodialysis: DRiL, Central Port, HeROgraft</u>			
Seven	Case Study Presentation 2 Due		Journal article Arterial Lower HW 3	1-4
Eight	<u>Lower extremity Arterial Duplex:</u> Bypass, Stents, Plasty. -Pathology/Hemodynamics and duplex -Follow up guidelines -Exam Write up (duplex)	Supplement Handout Rumwell Ch 2,5,6 Daigle: Ch 9,10 Rumwell Ch 2,5,6 Daigle: Ch 11,12 -Journal Article on follow up guidelines	HW 3 due Journal article Arterial Quiz 3	1,2
Nine	Test #2 Case Study Presentation 3 Due		Journal article Hemodialysis HW 4	1-4
Ten	<u>Lower extremity Arterial Physiologic Hemodynamics and Physiologic exam</u> <u>-Follow up guidelines</u> <u>-Exam Write up (physiologic)</u>	Supplement Handout Rumwell Ch 2,5,6 Daigle: Ch 9,10 Rumwell Ch 2,5,6 Daigle: Ch 11,12	HW 4 due Journal article	1,2
Eleven	Case Study Presentation 4 Due			1-4
Twelve	<u>Upper extremity Arterial Duplex Hemodynamics and Physiologic exam</u> Allen's, TOS, Raynauds etc. <u>-Exam Write up (physiologic)</u> Test #3	Supplement Handout	Quiz 4	1,2
Thirteen	Renal Arterial: Diagnosis and Etiology, bypass, transplant, stent, plasty	Supplement Handout	Journal article Hemodialysis HW 5	1- 3
Fourteen	Mesenteric Arterial: SMA Syndrome, MALS. Diagnosis, Etiology. Stents, plasty	Supplement Handouts	Quiz5 HW 5 due Journal article	1,2
Fifteen	Final Case Study Presentations Due			1-4
Sixteen	Comprehensive Arterial Final Exam			1-4

Disclaimer: The instructor reserves the right to amend this syllabus as deemed necessary and will communicate such amendment to the students in the course. Please note that while unlikely, there is a possibility courses might need to change the delivery method due to external issues like public health concerns, weather issues, etc. If this happens, the college will communicate any changes via email and/or other communication methods.